CLAIMS

1. A wet-gas desulfurizing apparatus which removes [the] oxides of sulfur, such as SO₂ from combustion exhaust gas by scrubbing the combustion exhaust gas with an absorption liquidwhich contains an alkali, said apparatus comprising:

a branch pipe for circulating the absorption liquid, said branch pipe extending into a collection tank and having an end which discharges the absorption liquid into the collection tank, and an internal diameter D; and

an air-blowing pipe for injecting air into said branch pipe, said air-blowing pipe having an end inserted into said branch pipe at an insertion point located between 3D and 10D from the discharge end of said branch pipe.

- 2. A wet-gas desulfurizing apparatus according to claim 1, wherein said branch pipe branches from a distribution pipe downstream of a circulation pump on said distribution pipe which connects the collection tank and a spraying means for spraying the absorption liquid into the combustion exhaust gas.
- 3. A wet-gas desulfurizing apparatus according to claim 1, wherein the end of said air-blowing pipe inserted into said branch pipe is configured as a semicircular trough facing the downstream toward the collection tank.
- 4. A wet-gas desulfurizing apparatus according to claim 1, wherein said end of said air-blowing pipe inserted in said branch pipe has an interior diameter of about 0.4D to 0.7D.
- 5. A wet-gas desulfurizing apparatus according to claim 1, wherein an orifice is provided in said branch pipe, upstream from said insertion point where said air-blowing pipe is inserted into said branch pipe, and said insertion point is located in a region of negative pressure created by said orifice.

6. A wet-gas desulfurizing apparatus according to claim 5, wherein said orifice has a diameter which is approximately 2/3 to 3/4 that of said branch pipe.

7. A wet-gas desulfurizing apparatus according to claim 5, wherein the flow rate of the absorption liquid through said orifice is set between 8 to 14 m/sec.